

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-36 are presently pending in this case. Claims 2, 3, 7, 8, 10, 12, 13, 18, 19, 23-26, and 28-34 are amended by the present amendment. Amended Claims 2, 3, 7, 8, 10, 12, 13, 18, 19, 23-26, and 28-34 are supported by the original claims and specification,¹ and therefore add no new matter.

In the outstanding Office Action, the drawings were objected to as containing informalities. Claims 2-5, 7-8, 10-16, 18-21, 23-24, 26-29, 32, 33, and 34 were rejected under 35 U.S.C. §112, second paragraph, as indefinite. Claims 30 and 31 were rejected under 35 U.S.C. §102(e) as anticipated by Sebastian et al. (U.S. Patent No. 6,718,506, hereinafter “Sebastian”). Claims 1, 6, 9, 17, 22, 25, 35, and 36 are allowed.

Applicants gratefully acknowledge the allowance of Claims 1, 6, 9, 17, 22, 25, 35, and 36.

Claims 2, 7, 9, 10, 23, 25, and 26 are amended to correct informalities.

In response to the objection to the drawings, one replacement drawing sheet is submitted herewith. Figures 7, 8, and 9 are amended to include the legend “Background Art.” The amended drawings are supported by the original drawings and specification. No new matter has been added. Accordingly, the objection to the drawings is believed to have been overcome.

With regard to the rejection of Claims 2-5, 7-8, 10-16, 18-21, 23-24, 26-29, 32, 33, and 34 under 35 U.S.C. §112, second paragraph, the rejection is respectfully traversed in light of the amendment submitted herewith.

¹See e.g. Specification at page 22, lines 11-22.

Claims 2, 7, 10, 18, 23, and 26 are amended to recite “where the Q is a byte number which configures one column of the PO” to clarify the meaning of the variable “Q.”

Claims 3 and 19 are amended to change “(N × P)” to “(N + P).”

Claims 8 and 24 are amended to replace “the error-correcting code (EDC)” with “the error detection code (EDC).”

Claims 12 and 28 are amended to change “an SRAM (Static-RRM)” to “Static-RAM.”

Claims 13 and 29 are amended to recite “said error-correcting code PI senses an error by calculating only an R-byte part of the pattern sense value obtained from the P-byte error-correcting code PI, where R < P.”

Claim 32 is amended to clarify the claimed subject matter.

Claims 33 and 34 are amended to replace “an error-correcting code PI (containing P bytes) for each row in a plurality of rows of data” with “a P-byte error-correcting code PI for each row in a plurality of rows of data.”

Accordingly, Claims 2, 3, 7, 8, 10, 12, 13, 18, 19, 23, 24, 26, 28, 29 and 32-34, and all claims dependent therefrom, are believed to be in compliance with all requirements under 35 U.S.C. §112, second paragraph.

With regard to the rejection of Claims 30 and 31 under 35 U.S.C. §102(e) as anticipated by Sebastian, the rejection is respectfully traversed.

Amended Claim 30 recites a data processing device comprising:

means for creating an error-correcting code PI for each row in a data block and storing both the error-correcting code PI and said data block into a memory; and

means for performing an error correcting process on the rows of the data block on the basis of said error-correcting code PI, when an error-correcting code PI-added data block is read from said memory in a transmission or recording system, and for transmitting data in a form of the recovered error-correcting code PI-added data block without storing the data in the memory again.

Sebastian describes a high speed DVD error correction engine where, while encoding, the corrected data is written back into the DRAM/SDRAM 10.² Thus, if an error is introduced into the data by a faulty bit in the DRAM (i.e. a bit stuck at “1” or “0”), rewriting corrected data into the faulty DRAM will only reintroduce the error, as the stuck bit has not been repaired. Therefore, the entire error correction process is wasted, as the error remains in the data.

In contrast, the apparatus recited in Claim 30 includes means for “transmitting data in a form of the recovered error-correcting code PI-added data block *without storing the data in the memory again.*” It is respectfully submitted that Sebastian does not teach this element of Claim 30. Since Sebastian does not teach each and every element of Claim 30, Claim 30 is not anticipated by Sebastian and is patentable thereover.

Amended Claim 31 recites similar elements to Claim 30. It is respectfully submitted that Claim 31 is patentable over Sebastian for the reasons discussed above with respect to Claim 30.

Accordingly, the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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²See Sebastian, column 4, lines 55-57 and Figure 5B.